## **REMARKS**

Claims 2-37 are pending, of which claims 2, 10, 11, 13-16, and 19 are amended. Claim 1 in cancelled herein. Applicants thank the Examiner for the indication of allowable subject matter in claims 2-9, 12, and 20-37.

## Rejections of the Claims

Claims 21-37 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1, 13-15, 19, and 21 have been rejected under 35 U.S.C. §102(b) as being anticipated by <u>Upton et al.</u> (US 5,420,541), and claims 10, 11, and 16-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over <u>Upton et al.</u>

## Rejections under 35 U.S.C. §112, Second Paragraph

Claims 21-37 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, the Examiner objects to the terms "first differential output signal" and "second differential output signal" as used to each refer to a single output as the term "differential" is understood in the electrical arts to mean "two." Applicants disagree that in the electrical arts "differential" means "two," and suggest instead that in the electrical arts "differential" means "pertaining to a difference." Even if, *arguendo*, "differential" does means "two" in the electrical arts, Applicants assert that the terms at issue are not indefinite.

With respect to the definiteness standard of 35 U.S.C. §112, second paragraph, "[t]he essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made" (MPEP §2173.02). Applicants assert that one possessing the ordinary level of skill in the electrical arts at the time the invention was made, in view of the content of the present application disclosure, would interpret the terms "first differential output signal" and "second differential output signal" to be first and second signals of the differential output, and would not read into the terms that each differential output signal itself comprises two further sub-components.

Applicants note that the phrase of claim 21 that includes the rejected terms recites "processing an input signal via an active phase shifter to generate a differential output, the

differential output further comprising a first differential output signal and a second differential output signal, the first differential output signal and the second differential output signal having a phase difference" and the specification teaches, for example, "an active phase shifter coupled to the carrier input terminal and the peak input terminal for generating a peak amplifier input signal delayed in phase from a carrier amplifier input signal" (paragraph [00010] page 4). Here, one of ordinary skill in the art would recognize that the peak and carrier amplifier input signals are examples of the first and second differential output signals. There is no indication that either of the peak and carrier amplifier input signals are further bifurcated. Rather, if "differential" does mean "two" in the relevant art, one of ordinary skill would read the "differential output" as an output having two components, and would understand that the first and second differential output signals are those two components. Accordingly, claim 21 sets out and circumscribes the claimed subject matter with at least a reasonable degree of clarity and particularity, as required. Applicants therefore request that the Examiner withdraw the rejections of claims 21-37 under 35 U.S.C. §112, second paragraph.

## Rejections under 35 U.S.C. §§102(b) and 103(a)

Claims 1, 13-15, and 19 have been rejected under 35 U.S.C. §102(b) as being anticipated by Upton et al., and claims 10, 11, and 16-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Upton et al. Claim 2, as amended, has been rewritten in independent form to recite the limitations of claim 1, now cancelled. The rejection of claim 1 is therefore moot. Applicants note that in claim 1 the output matching unit was "for transmitting a carrier output power signal and a peak output power signal" whereas in claim 2 the output matching unit is "for receiving a carrier output power signal and a peak output power signal." As the Examiner indicated that claim 2 included patentable subject matter, Applicants contend that claim 2 is now allowable. Applicants have also amended claims 10, 11, 13-16, and 19 to depend from claim 2 rather than claim 1. Accordingly, each of claims 3-20 also depends from claim 2 and are therefore patentable over Upton et al. Applicants therefore request that the Examiner withdraw the rejections of claims 13-15 and 19 under 35 U.S.C. §102(b) and claims 16-18 under 35 U.S.C. §103(a).

Independent claim 21 has been rejected under 35 U.S.C. §102(b) as being anticipated by <u>Upton et al.</u>, however, claim 21 has also been noted as including allowable subject matter. The rejection under 35 U.S.C. §102(b) is believed to be in error as the limitations of claim 21 are not specifically discussed under the 35 U.S.C. §102(b) rejection. On the other hand, the

Examiner notes that the claims with allowable subject matter "call for, among others, a phase control unit for tuning a phase difference to within a phase tolerance" (Office action page 5) and claim 21 recites "tuning the phase difference to within a phase tolerance based upon input signal characteristics." Applicants therefore request that the Examiner withdraw the rejection of claim 21 under 35 U.S.C. §102(b).

All pending claims are allowable and Applicants therefore respectfully request a Notice of Allowance from the Examiner. Should the Examiner have questions, the Applicants' undersigned agent may be reached at the number provided.

Respectfully submitted,

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